AFRICA 2020

GT 2015 estimated that the interplay of demographics and disease – as well as poor governance – would be the major determinants of Africa's increasing international marginalization in 2015. Developments over the past three years have only reinforced rather than diminished that finding. The relentless progression of AIDS continues, with HIV seropositivity rates in the most severely affected countries holding steady or in many cases mounting, while the two most populous countries in sub-Saharan Africa (SSA), Nigeria and Ethiopia experience major increases in HIV prevalence.

Most African states will miss out on the economic growth engendered elsewhere by globalization and by scientific and technological advances. Only a few countries will do better, while a handful of states will have hardly any relevance to the lives of their citizens. As SSA's multiple and interconnected problems are compounded, ethnic and communal tensions will intensify, periodically escalating into open conflict, often spreading across borders and sometimes spawning secessionist states.

Of the seven key drivers identified in GT 2015, demographics is the most important in Africa. SSA's population growth rate is among the highest in the world, despite the ravages of AIDS, which is distorting the demographic profile and exacerbating the youth bulge; half of SSA's population will be under the age of fifteen in 2020. As the number of able-bodied agricultural workers declines, relative to mouths to feed, malnutrition rates will increase and create the potential for famine where the combination of internal conflict and recurring natural disasters prevents or limits relief efforts.

Urbanization will accelerate with many capitals and commercial centers/port cities doubling in size but without a commensurate growth of basic infrastructure and services. The relative decline of the rural sector and rapid urbanization will be most profound in economies narrowly based on petroleum and mineral extraction. Luanda could prove the paradigm for the emergence of the city-state, where most of the national wealth is concentrated, and the countryside is increasing ignored and essentially ungoverned. Unrepresentative governance will drive the city-state phenomena and promote growing income inequality that should prove especially volatile politically within a population dense urban environment.

The positive effects of globalization with its emphasis on information technology and an educated work force largely will by-pass SSA. As a stimulus for greater labor mobility, globalization will foster a continuing brain drain from SSA. Today one-half of the medical doctors and PhDs produced by Nigeria reside in the United States. Even less skilled workers will be motivated to seek employment in more attractive venues such as Europe and the Arabian Peninsula. The movement of people on the continent from the poorer regions to the relatively more affluent will be hard to control as the efficiency of state security mechanisms decline. Competition for jobs between indigenous peoples and migrants will be most contentious and more susceptible to conflict, where the new arrivals are of different ethnic and religious backgrounds. This phenomenon will be most

profound in West Africa, where Islamic peoples of the Sahel seek employment in the more affluent coastal areas.

Of all the drivers enumerated in GT 2015 science and technology will have the least impact in SSA as compared to other areas of the world. The African capacity for innovation and discovery is stagnant at best as institutions of higher education atrophy for lack of investment and loss of some of the best faculty. The most promising area for the application of science is in agriculture, especially the development of GMOs better suited to the African environment. Roadblocks, beyond the lack of domestically based research capacity, most notably opposition led by Europe, are inhibiting the application of the new technology. The one notable exception is South Africa, which could prove a leader in the propagation of GMOs. Advances in science and technology can prove negative for Africa's extractive industries; witness the decline in copper prices with the development of fiber optics. Similarly, the successful commercial introduction of fuel cell technology would prove deleterious to oil based rentier economies like Nigeria and Angola, but this is highly unlikely before 2020.

Natural resources and environment are essentially neutral as a driver, with the notable exceptions of very high value, concentrated resources, such as oil, diamonds, and gold. Africa's relatively rich natural resource endowment will not be productively exploited if negative trends, as is most likely with the two most determinant drivers, national governance and future conflict, persist. Lacking peaceful, stable environments in states with a rule of law in which disputes can be regulated, domestic and foreign investments will not be made, especially in extractive industries that require high capital investment (ports, railways, refining plants, etc.) and long capital amortization schedules.

Conflict has been and will persist in the 2020 timeframe to be the major inhibitor of political and economic development on the continent. It will be mostly ethnic and communal, with disputes centering on the division of national resources, rather than interstate warfare. Indeed, few states will be capable of arming and maintaining military forces capable of projecting power beyond their borders. The notable exceptions will be South Africa, Nigeria, Angola, and Sudan. Lesser states, with financial resources, may be able to accomplish limited extra-territorial missions with the aid of non-state contractors providing transport, maintenance, and logistics. Most conflicts will be low-tech, with RPGs, AK-47s, mortars, and trucks being the main instruments of war making.

International governance (i.e. the UN system) will look to African institutions (e.g. the African Union, ECOWAS and SADC) in the first instance to provide the leadership and manpower to exercise peace-making and keeping functions on the continent. The latter can provide the troops, but will need international finance, and force multipliers (e.g. airlift, communications, intelligence, etc.) supplied by developed world donors to successfully carry out their PKOs.

The role of the United States, like the former colonial powers and Russia has declined in SSA since the end of the cold war and will continue to do so in the 2020 timeframe. With

the exception of the import of West African oil, Africa is of little economic significance to the United States; it represents no more than 1% of total foreign trade and investment. When considering international drivers, it would be more interesting to consider external actors other than the United States. The world's two most populous states and increasingly dynamic economies, China and India, are becoming attentive to and relevant to SSA's future. Both already are dependent on imports for their energy needs and will become increasingly attracted by the relative security and attractiveness of Africa as a source of petroleum. As states transitioning to a higher state of economic development they offer a plausible model and produce goods at both the lower (plastics, textiles, etc.) and higher (computers, software, etc.) level of technology that are of interest to Africa. China is only exceeded by the US as an importer of Angolan and Nigerian oil, and is a major investor, along with India, in the Sudanese oil industry.

Not to be overlooked are non-state actors; international arms merchants and illicit dealers in valuable African minerals; they have and retain the potential to support insurgent movements and warlords for profit. Often, failing or collapsed states retain little more than their sovereignty for sale, and willingly offer ship registry, plane registration, and arms licenses to the highest bidders.

The United Nations system will remain the institution of last resort to address Africa's persistent political and humanitarian crises. While individual external actors may be unwilling to take on the burden and responsibility of tackling African problems or even be rejected by Africans who fear their dominance, the UN will prove the vital institution to organize an international response.

The increasing importance of religion in Africa merits its consideration as a driver in the 2020 context. As states fail to protect, provide services, and nurture their citizenry, Africans are turning to the spiritual world for solace and to the institutions of religion for support. The most dynamic and growing religious groups in Africa are of a fundamentalist bent, both Islamic and Christian. The Islamists are influenced heavily by foreign missionaries and the resources they bring with them, while the Christian are reflecting more indigenous influences. Where they come into contact and competition for adherents, such as in the transitional zone in West Africa between the Sahel and the Coast the potential for confrontation and communal violence are greatest. While the dangers inherent in rivalry are readily apparent, enhanced commitment to Christian and Islamic values could lead to stronger families, greater community cohesion, and respect for the rule of law.

Wild cards for Africa range from the plaus ible and positive, to the catastrophic and possible. All nations or regions, no matter how poor or afflicted, enjoy comparative advantages; Africa's lies in agriculture, a once robust sector in the colonial period and one capable of recovery with good policy, both domestic and foreign. A reduction of domestic agricultural subsidies, the lowering of duties, and elimination of non-tariff barriers to trade in the United States and European Union, combined with the propagation of GM crops, greater provision of agricultural extension services, and the elimination of agricultural pricing that subsidizes urban consumers in Africa could lead to a resurgence

of the agricultural sector. Under the best of circumstances a rural renaissance will only provide slow but steady national income growth due to persistent problems of inadequate farm to market roads, warehousing/storage, crop finance, and markets. It, however, will provide greater stability, food security, and a brake on rapid urbanization.

AIDS will continue to take its heavy toll in Africa absent a major medical breakthrough and dramatic advances in education and changed cultural attitudes. Equally lethal diseases with much shorter contraction to death timeframes such as Lassa fever, Marburg and Ebola viruses have been reasons for alarm, but have proved susceptible to confinement within the African context. It is the airborne flu viruses such as SARS that pose the greatest threat of catastrophe. While the warmer African climate is less hospitable to SARS than the temperate climes with their winter months, it is not immune to the rapid spread of the disease. Africa's inadequate to practically non-existent public health infrastructure would be incapable of quarantining the disease. The lethality of SARS would be especially profound due to the impaired immune systems of tens of millions of HIV positive Africans. A SARS like disease once established in Africa will prove extremely difficult to eliminate and could lead to constraints imposed by the developed world on the movement of African persons and products.

The reality of AIDS is with us, but how it will play out is uncertain. An expected leveling or reduction of infection rates in some of the most severely effected countries has not materialized. The most populous states, Nigeria and Ethiopia, are entering a take-off stage. Africa's declining per capita food production is resulting in poorer nutrition, which accentuates the progression of the disease among the HIV positive. Infection rates among women, who primarily contract the disease from their husbands, are increasing relative to men. Herein, resides the potential genesis of a low probability but high impact social and political development, the mobilization and empowerment of women to combat the spread of the disease, seek treatment, and participate in the political life of their communities and nations. Women in Uganda and the most severely AIDS effected countries of Southern Africa are already demonstrating a new and greater independence and activism. How far the movement progresses will be largely determined by the reaction of male leadership and their ability to co-opt and accommodate the women's new energy and demands.

Terrorism probably is the wildest card of all in Africa. SSA presents the softest target of all the regions of the world, largely due to the plethora of failing states, weak security forces, and porous borders. It's potential as a recruiting ground, is highlighted by the numbers of undereducated, unemployed, young men that swell the ranks of insurgent movements and local warlords. The lack of sophisticated infrastructure, however, complicates the activities of the terrorist as well the Western businessman. Africa most likely will serve as haven, training ground, and staging area for the terrorist rather than as a leadership center. The very weaknesses that attract the terrorist can make unilateral counter-terrorist operations less complex and costly in terms of relations with host governments. It is precisely in the more sophisticated environments (communications, banking, etc.), with relatively competent governments, such as South Africa, that the terrorist could prove most dangerous and difficult to root out.